OPINIONS AND DECLARATIONS RENDERED BY THE INTER-NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E. Secretary to the Commission

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OPINION 449

Determination of the species to be accepted as the type species of the nominal genus *Laqueus* Dall, 1870 (Class Brachiopoda)

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MULHSUN

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

COMPOSITION AT THE TIME OF THE ADOPTION OF THE RULING GIVEN IN OPINION 449

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July 1948)

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Poland) (15th June 1950) essor Robert MERTENS Professor (Natur-Museum u. Forschungs-Institut Senckenberg,

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Dr. K. H. L. KEY (Commonwealth Scientific and Industrial Research Organisation, Canberra, A.C.T., Australia) (15th October 1954)
 Dr. Alden H. MILLER (Museum of Vertebrate Zoology, University of California, U.S.A.) (29th October 1954)

Doc. Dr. Ferninand PRANTL (Národni Museum v Praze, Prague, Czechoslovakia) (30th

October 1954) Professor Dr. Wilhelm KÜHNELT (Zoologisches Institut der Universität, Vienna, Austria) (6th November 1954)

Professor F. S. BODENHEIMER (The Hebrew University, Jerusalem, Israel) (11th November 1954)

Professor Ernst MAYR (Museum of Comparative Zoology at Harvard College, Cambridge) Massachusetts, U.S.A.) (4th December 1954)
 Professor Enrico TORTONESE (Museo di Storia Naturale "G. Doria", Genova, Italy)

(16th December 1954)

OPINION 449

DETERMINATION OF THE SPECIES TO BE ACCEPTED AS THE TYPE SPECIES OF THE NOMINAL GENUS "LAQUEUS" DALL, 1870 (CLASS BRACHIOPODA)

RULING :—(1) It is hereby ruled (a) that no case has been established to show that, when in 1870 Dall (W.H.) established the nominal genus *Laqueus* (Class Brachiopoda), he misidentified the nominal species *Terebratula californiana* (Koch MS) Küster, [1844] which he then designated as the type species of the foregoing genus and (b) that the foregoing nominal species is therefore to be accepted as the type species of the genus *Laqueus* Dall, 1870.

(2) The under-mentioned generic name is hereby placed on the *Official List of Generic Names in Zoology* with the Name Number 1055 :—

Laqueus Dall, 1870 (gender : masculine) (type species, by original designation : Terebratula californiana (Koch MS.) Küster, [1844])

(3) The under-mentioned specific name is hereby placed on the *Official List of Specific Names in Zoology* with the Name Number 1130 :---

californiana (Koch MS.) Küster, [1844], as published in the combination *Terebratula californiana* (specific name of type species of *Laqueus* Dall, 1870)

(4) The under-mentioned specific names, each of which is an Erroneous Subsequent Spelling for *californiana* (Koch MS.) Küster, [1844], as published in the combination *Terebratula californiana*, are hereby placed on the *Official Index of Rejected and Invalid Specific Names*

in Zoology with the Name Numbers severally specified below :---

- (a) californica (misattrib. to Küster) Sowerby (G.B.), 1846, as published in the combination *Terebratula* californica (Name No. 376);
- (b) californiana Troschel, 1849¹, as published in the combination *Terebratula californiana* (Name No. 377);
- (c) *californica* (Koch MS.) Carpenter, 1864, as published in the combination *Terebratula californica* (Name No. 378);
- (d) californica (Koch [MS.]) Dall (W.H.), 1870, as published in the combination *Terebratula* californica (Name No. 379).

I. THE STATEMENT OF THE CASE

The question whether the nominal genus Laqueus Dall, 1870 (Class Brachiopoda) should be regarded as having been established with a misidentified type species formed the subject of a preliminary enquiry addressed to the Office of the Commission by Dr. Joshua L. Baily, Jr. (San Diego, California, U.S.A.) on 26th March 1946. The International Commission was not well equipped at that time to deal with cases where later authors were of the opinion that the author of a nominal genus had misidentified the species which he then designated as the type species of that genus, the only guidance at that time available being the ambiguous and incomplete Ruling given in Opinion 65 (1914, Smithson. Publ. 2256: 152-169). Even if this had been the case, it would not have been possible for the Commission

¹ See paragraph 12 below.

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to take up the present case at the time of the receipt of Dr. Baily's preliminary communication, for, as Dr. Baily agreed, serious bibliographical difficulties then remained to be solved in regard to the orthography and authorship of the specific name used by Dall in 1870 for the species which he then designated as the type species of his new genus Laqueus. Later these matters were investigated as opportunity offered with the result that the bibliographical difficulties referred to above were resolved by the autumn of 1950. By this time also firm guidance had been given to the Commission by the Thirteenth International Congress of Zoology as to the procedure to be followed in dealing with cases of genera reputedly based upon misidentified type species (1950, Bull. zool. Nomencl. 4: 158-159). Other reasons intervened to prevent progress with the present case and it was until 3rd November 1954 that the following application was submitted to the International Commission on Zoological Nomenclature for consideration :---

Request for a Ruling as to the species to be accepted as the type species of the genus "Laqueus" Dall, 1870 (Class Brachiopoda)

By JOSHUA L. BAILY, Jr., Sc.D. (San Diego, California, U.S.A.)

The object of the present application is to secure a decision from the International Commission regarding the species to be accepted as the type species of *Laqueus* Dall, 1870 (Class Brachiopoda), under the procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (see 1950, *Bull. 2001. Nomencl.* 4:158-159) to be followed where a nominal genus is established, or is claimed to have been established, on the basis of a misidentified type species.

2. The generic name Laqueus was published by Dall in 1870 (Amer. J. Conch. 6: 123), the type species of the genus so named being, by original designation, "Terebratula californica Koch". Koch never published such a name but in 1844 Küster (in Martini, Syst. Conch. Cab. (nov. ed.) 7(1): pl. 2b, figs. 21–23) published the name Terebratula californiana Koch MS., and it is evident that this was the name which Dall intended to cite when he wrote the words "Terebratula californica Koch".

3. In 1921 (Proc. U.S. nat. Mus. 57 (No. 2314) : 347) Dall claimed that the species which in 1870 he had figured as "Laqueus californica

(Koch)" was not correctly identified and belonged to a species to which no valid name had ever been given; Dall accordingly gave the new name *Laqueus erythraeus* to the species which he had himself figured in 1870 under the name "*Laqueus californica* Koch" and which in 1864 Carpenter had cited as *Terebratula californica*. The species *Laqueus erythraeus* Dall was thereupon (1921) designated by Dall as the type species of *Laqueus* Dall, 1870, in place of the species "*Terebratula californica* Koch", which in 1870 he had himself designated as the type species of this genus.

4. Thompson (1927, Brachiopod. Morph. Gen.: 258) discussed the attempt made by Dall in 1921 to change the type species of Laqueus and rejected it as incorrect under the Règles. At the same time he added that the two species concerned were so closely allied to one another that, even if Dall's action in changing the type species had been valid, it would not have affected the previously accepted concept of the genus. Later authors have all endorsed Thomson's conclusions and have unanimously rejected the claim advanced by Dall in 1921.

5. The present case is therefore one where a nominal genus is alleged to have been based upon a misidentified type species but where the species actually designated by the original author as the type species and the species later claimed to have been misidentified therewith are so close to one another that from the taxonomic point of view it would make no difference which of the two species concerned was accepted as the type species. It is clearly desirable that a definitive decision should be given as to the species which is to be accepted as the type species of *Laqueus* Dall, but in the circumstances it does not appear that any practical advantage would be served by asking the International Commission to undertake, in conjunction with specialists, a detailed investigation for the purpose of deter-mining whether Dall's (1921) claim that he had made an error of identification in 1870 was well founded. In the absence of such evidence, the Commission would be free-and indeed bound-to rule in favour of the acceptance of Terebratula californiana (Koch MS.) Küster, [1844] (i.e. the species bearing the name which Dall in 1870 miscited as "*Terebratula californica* Koch") as the type species of *Laqueus* Dall by original designation. Such a decision would be in harmony with current practice and is therefore the course which I recommend.

6. The proposal which I accordingly submit is that the International Commission on Zoological Nomenclature should :---

(1) give a ruling that, in view of the lack of sufficient evidence supporting the claim advanced by Dall in 1921 that, when in 1870 he designated a type species for the nominal genus *Laqueus* Dall, 1870, he had misidentified the species so designated, that species, namely *Terebratula californiana* (Koch MS.) Küster, [1844], is to be accepted as the type species of *Laqueus* Dall, 1870;

- (2) place the name Laqueus Dall, 1870 (gender : masculine) (type species, by original designation : Terebratula californiana (Koch MS.) Küster, [1844]) on the Official List of Generic Names in Zoology;
- (3) place the specific name *californiana* (Koch MS.) Küster, [1844], as published in the combination *Terebratula californiana*, on the *Official List of Specific Names in Zoology*;
- (4) place the under-mentioned specific name on the Official Index of Rejected and Invalid Specific Names in Zoology: californica Dall, 1870, as published in the combination Terebratula californica (an Erroneous Subsequent Spelling for californiana (Koch MS.) Küster, [1844], as published in the combination Terebratula californiana).

2. Supplementary Note furnished by Dr. Helen Muir-Wood (British Museum (Natural History), London) : At a certain stage in the course of the investigations into the bibliographical investigations referred to in the preceding paragraph, Mr. Hemming, as Secretary, decided that it would be of advantage to widen the scope of the consultations then in progress by consulting Dr. Helen Muir-Wood (British Museum (Natural History), London) as a leading specialist in the group concerned. Dr. Muir-Wood kindly agreed to assist in this matter and on 21st September 1950 communicated the following statement to the Office of the Commission :—

On the type species of the Brachiopod genus "Laqueus" Dall, 1870

By HELEN MUIR-WOOD, D.Sc. (British Museum (Natural History), London)

(Enclosure to a letter dated 21st September 1950)

The name Laqueus was published by Dall in 1870 (Amer. J. Conch. 6: 123) as the name of a subgenus of Terebratella with Terebratula

californica Koch as type species. The species is said to occur off Catalina I., California, at a depth of 80 fathoms, but this is quoted by Dall (1921 : 350) as type locality of *L. erythraeus*.

2. This species was, however, originally described under the name *Terebratula californiana* (Koch *in litt.*) Küster (therefore to be assigned to Küster and not Koch) in Nov. Ed. Martini, *Syst. Conch. Cabinet* 7(1): 38, pl. 2b, figs. 21–23. The date of the plate is given in our copy as 1844, while the date of the text is said to be 1848 (see 1937, *J. Soc. Bibl. nat. Hist.* 1(4): 97).

3. Dall in 1870 also refers to Sowerby, *Thes Conch.* **7** : 352, pl. 52, figs. 50—52, but this reference is incorrect and should be emended to read : Sowerby (G.B.), 1846, *Thes. Conch.* 1(7) : 352, pl. 70, figs. 50—52, where this species was described and figured under *Terebratula californica* Küst.

4. The species represented by the figures given by Küster and Sowerby is apparently the same.

5. Dall in 1877 (Bull. U.S. nat. Mus. 8:41) again quoted T. californica Koch as the type species of Laqueus, subgenus of Terebratella.

6. Davidson (1887, Trans. linn. Soc. Lond. (Zool.) (2) 4:111) quotes the type-species of Laqueus as L. californicus Koch, though in 1852 (Ann. Mag. nat. Hist. (2) 9:364) the species was listed as Terebratula californiana Koch, Küster. E. E. Deslongchamps in 1884 (Bull. Soc. linn. Normandie (3) 8:286) quotes Laqueus as a subgenus of Terebratella with T. californica Koch as type-species, and this is followed by Hall & Clarke in 1895 (13th ann. Rep. State Geol. N.Y. 1893: 887), who used it as a distinct genus.

7. Dall in 1921 (*Proc. U.S. nat. Mus.* 57 (2314) : 347) quoted *Laqueus* as a separate genus, with, as its type-species, *L. californicus* Carpenter not Koch (=*Laqueus erythraeus* sp. nov.), to which species he refers his figures published in 1870 (namely pl. 7, fig. f; pl. 8, figs. 9, 10) and also the species described by Carpenter in 1864 (*Suppl. Rep. Brit. Ass.* 1863 (33rd meeting) : 568, 574) as *Terebratula californica* and (on page 636) as *Waldheimia* (?) *californica.* Carpenter gave no figures and it is by no means clear what was the form to which he intended to refer.

8. Thomson (1927, Brachiopod Morph. Gen. : 258) quotes the typespecies as T. californica Koch and refers to Dall's amendment of the

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type species in a footnote, stating that this procedure is not valid but that it does not affect the concept of the genus. Schuchert & Levene (1929, Foss. Catal. 1(42) (Brach.): 73) and Hatai in 1940 (Sci. Rep. Tohoku Univ. (2) 20: 343) also give the type-species as Terebratula californica Koch without comment.

9. From this it appears that later authors have ignored Dall's emended designation of the type species in 1921, and that *Terebratula californiana* Küster, [1844], should be accepted as the type species of *Laqueus* Dall, 1870, by original designation.

3. Postscript added by Dr. Joshua L. Baily, Jr. to his application in December 1954 : In December 1954 Dr. Joshua L. Baily, Jr. communicated to the Office of the Commission a note which he had prepared in the light of the statement furnished by Dr. Helen Muir-Wood (paragraph 2 above), a copy of which had been communicated to him by the Secretary. This note, which was in the following terms, Dr. Baily asked should be attached to his application as a Postscript :—

I have read with great interest the note on the species to be accepted as the type species of *Laqueus* Dall which has been communicated to the Commission by Dr. Helen Muir-Wood, of which the Secretary has kindly sent me a copy. I am very glad to find that she supports the solution of this case advocated in my application.

Perhaps I may add that, as Dr. Muir-Wood has drawn attention to the publication by G. B. Sowerby in 1846 of the name *Terebratula* californica (attributed to Küster by Sowerby) it would, I think, be helpful to place this misspelling which anticipates that by Dall by twenty-four years on the Official Index of Rejected and Invalid Specific Names in Zoology. I would advocate the same treatment being given also to several other instances of the nomenclatorial combination Terebratula californica by Carpenter as follows :—

Terebratula californica Küster in Sowerby (G.B.), Thesaurus Conchyl. (18): 352, pl. 70, f. 50—52, cited by Carpenter, 1857 Report to the British Association for the Advancement of Science for 1856: 289. This is the same reference to which Dr. Muir-Wood referred.

Terebratula californica Koch, mentioned by Carpenter without any further reference in Supplementary Report to the British Association for the Advancement of Science for 1863 : 568, 586. Terebratula californica Linsley in Troschel, 1847, Archiv für Natur. 2:99³. Cited by Carpenter in Supplementary Report to the British Association for the Advancement of Science : 574.

2. So far as I am aware, the generic name *Laqueus* Dall has not been taken as a basis for a family-group name.

II. THE SUBSEQUENT HISTORY OF THE CASE

4. Registration of the present application : The case of the name *Laqueus* Dall, 1870, was originally brought to the attention of the Office of the Commission in a communication dealing also with the name *Magasella* published by the same author in the same paper. The joint communication so received was then allotted the Registered Number Z.N.(S.) 220. When later it was decided to separate these two cases, the foregoing Number was retained for *Magasella* Dall and the new Registered Number Z.N.(S.) 868 was allotted to the present case.

5. Publication of the present application : Dr. Baily's application, Dr. Helen Muir-Wood's supplementary statement and Dr. Baily's Postscript to his application were sent to the printer on 31st December 1954 and were published on 28th February 1955 in Part 4 of Volume 11 of the *Bulletin of Zoological Nomenclature* (Baily, 1955, *Bull. zool. Nomencl.* 11 : 117-118; Muir-Wood, 1955, *ibid.* 11 : 120; Baily, 1955, *ibid.* 11 : 118-119).

6. Support received from E. P. Chace and Elsie M. Chace (Natural History Museum, San Diego, California, U.S.A.) : On 10th May 1955 E. P. Chace and Elsie M. Chace (both of the *Natural History Museum, San Diego, California, U.S.A.*) jointly addressed a letter to the Office of the Commission on a number of cases which included the present case. The relevant extract of this letter is as follows :---

We fully agree with Dr. Baily that *Terebratula californiana* (Koch MS.) Küster is to be accepted as the type of *Laqueus* Dall, 1870, and

² For a correction of this reference see paragraph 12 of the present Opinion.

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that the name Laqueus Dall, 1870, be placed on the Official List of Generic Names in Zoology.

That the specific name *californiana* (Koch MS.) Küster, 1844, be placed on the *Official List of Specific Names in Zoology*, and that the specific name *californica* Dall, 1870, be placed on the *Official List of Rejected and Invalid Specific Names in Zoology*.

7. No objection received : No objection to the action proposed in the present case was received from any source.

III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

8. Issue of Voting Paper V.P.(55)32 : On 22nd November 1955 a Voting Paper (V.P.(55)32) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the generic name *Laqueus* Dall, 1870, as set out (a) in Points (1) to (4) in paragraph 6 on page 118 of Volume 11 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*] "and (b) in the Postscript added by the author on pages 118 and 119 of the above volume of the *Bulletin*" [see paragraph 3 of the present *Opinion*].

9. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 22nd February 1956.

10. Particulars of the Voting on Voting Paper V.P.(55)32 : At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(55)32 was as follows :---

(a) Affirmative Votes had been given by the following twenty-five
 (25) Commissioners (arranged in the order in which Votes were received):

Holthuis; Hering; Riley: Vokes; Mayr; Lemche; Prantl; Dymond; Esaki; Bodenheimer; do Amaral; Hankó; Boschma; Sylvester-Bradley; Jaczewski; Key; Mertens; Cabrera; Bonnet; Miller; Tortonese; Kühnelt; Bradley (J.C.); Stoll; Hemming;

(b) Negative Votes :

None;

(c) Voting Papers not returned :

None.

11. Declaration of Result of Vote : On 23rd February 1956, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(55)32, signed a Certificate that the Votes cast were as set out in paragraph 10 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

12. Correction of the reference given in the present application for the reputed name "'Terebratula californica' Linsley in Troschel, 1847": On 11th November 1956 Mr. Hemming, as

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Secretary, executed the following Minute, in which, after setting out certain bibliographical investigations which had been undertaken in the Office of the Commission in connection with the preparation of the present *Opinion*, he (a) showed that the name "*Terebratula californica* Linsley *in* Troschel, 1847" was a cheironym, (b) gave correct particulars for the name to which reference had been intended by the author who first cited the foregoing reputed but non-existent name and (c) issued directions that the corrected reference be inserted in the *Opinion* to be rendered in the present case :—

Correction of the reference given in the present application for the reputed name "Terebratula californica" Linsley in "Troschel", 1847

MINUTE by FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The routine checking of references undertaken in connection with the preparation of the *Opinion* required for the purpose of recording the decision regarding the type species of the genus *Laqueus* Dall, 1870, taken by the International Commission in its vote on Voting Paper V.P.(55)32 has disclosed the fact that the particulars derived from Carpenter, 1864, in regard to one of the names cited in the postscript to the present application is incorrect in almost every particular.³ The purpose of the present Minute is to give correct particulars regarding the name to which reference was intended, in order that in the *Opinion* concerned a correct reference for that name may be inserted in the paragraph enumerating the original references for the names placed on *Official Lists* and *Official Indexes* by the Ruling to be given in that *Opinion*.

2. The reference which it is now necessary to correct was quoted as follows from Carpenter in the application published in this case (Baily, 1955, *Bull. zool. Nomencl.* 11:119) :---

Terebratula californica Linsley in Troschel, 1847, Archiv für Natur.
2:99. Cited by Carpenter in Supplementary Report to the British Association for the Advancement of Science: 574

³ The reference in question was given in the Postcript, dated December 1954, annexed to the present application. This has been reproduced in paragraph 3 of the present *Opinion*.

3. The first indication that the foregoing reference was incorrect was provided by the abbreviation used for the title of the serial publication cited, there being no serial having a title which could be correctly cited in that manner. It seemed almost certain, however that the serial intended was the *Archiv für Naturgeschichte*, although it was evident that in that event either the date cited for the volume concerned or the volume number cited for it must be incorrect. Investigation showed that the anticipation that the serial intended was in fact the *Archiv für Naturgeschichte* was correct but that both the date attributed to that volume and the volume number cited for it were incorrect, the only correct portion of this part of the reference given being the page number (page 99). The paper in question proved to have been published in 1849 (and not in 1847) and to have appeared in Part 2 of Volume 15 of the *Archiv für Naturgeschichte* (and not in Volume 2).

4. The successful tracing of the paper in question disclosed unexpectedly two further errors in the reference given from Carpenter. paper in question, though unsigned, was First. the stated to have been written by the "Herausgeber" and the running heads of the pages in this portion of Part 2 of Volume 15 bore the name of Troschel, who, as is known, had in that year (1849) taken over the editorship of the Archiv, following the death of Erichson. The article contains, however, no reference whatever to Linsley who in the present context must be regarded as a phantom. The name with which we are here concerned must therefore be attributed not to "Linsley in Troschel" but to "Troschel" himself. Second, it must be noted that the article here under examination was expressly devoted to a 'Annals 2, Ser. II, notice recently published by Gray (cited as ' p. 435"), and that, contrary to the statement made in the reference quoted in paragraph 2 of the present Minute, the species there under discussion was cited not as "Terebratula californica" but as " Terebratula californiana".

5. It will be seen from the particulars given above that the name "*Terebratula californica* Linsley *in* Troschel, 1847" is a cheironym and that the name to which the author responsible for the above reference intended to refer is :—

Terebratula californiana Troschel, 1849, Archiv Naturgesch. 15(2):99

6. Accordingly, as Secretary, I hereby direct that the corrected reference set out in the immediately preceding paragraph be substituted for the incorrect reference quoted in paragraph 2 of the present Minute in the Ruling to be given in the *Opinion* embodying the decision taken by the Commission in its vote on Voting Paper V.P.(55)32.

13. Preparation of the Ruling given in the present "Opinion": On 12th November 1956 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(55)32, subject to the correction of the reference for one of the names concerned as directed in the Minute executed by the Secretary on 11th November 1956 (the text of which has been reproduced in paragraph 12 of the present *Opinion*).

14. Original References: The following are the original references for the names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* :—

- californiana, Terebratula, (Koch in litt.) Küster, [1844], in Martini, Syst. Conch. Cabinet (New Ed.) 7(1) : pl. 2b ; id., [1848], ibid. 7 : 38
- californiana, Terebratula, Troschel, 1849, Archiv Naturgesch. 15(2): 99

californica, Terebratula, (misattrib. to Küster) Sowerby (G.B.), 1846, Thes. Conch. 1(7): 352, pl. 70, figs. 50-52

- californica, Terebratula, Carpenter, 1864, Suppl. Rep. Brit. Ass. 1863 (33rd Meeting) : 568, 574
- californica, Terebratula, (Koch [MS.]) Dall (W.H.), 1870, Amer. J. Conch. 6: 123
- Laqueus Dall, 1870, Amer. J. Conch. 6:123

15. Family-Group-Name Aspects: It was stated by the applicant in the Postscript, dated December 1954, annexed to his application (paragraph 3 of the present *Opinion*) that, so far as he was aware, the generic name *Laqueus* Dall, 1870, has not been taken as the base for a family-group name.

16. The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the under-signed Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

17. The present *Opinion* shall be known as *Opinion* Four Hundred and Forty-Nine (449) of the International Commission on Zoological Nomenclature.

DONE in London, this Twelfth day of November, Nineteen Hundred and Fifty-Six.

Secretary to the International Commission on Zoological Nomenclature

FRANCIS HEMMING

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